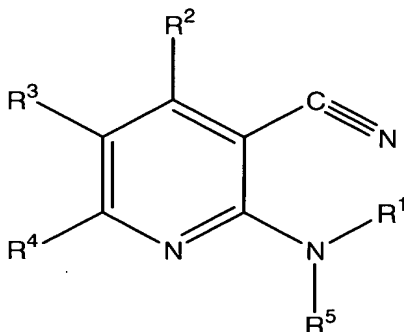


**WHAT IS CLAIMED IS:**

1. An aminocyanopyridine compound, or a pharmaceutically acceptable salt or tautomer or isomer thereof, the compound having the structure:



5

wherein:

R¹ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylamino, C₁-C₄ alkyl, di-(C₁-C₄ alkyl)amino C₁-C₄ alkyl, C₁-C₄ alkyl-C₁-C₄ alkyl, hydroxy C₁-C₄ alkyl, and aryl C₁-C₄ alkylcarbonyl;

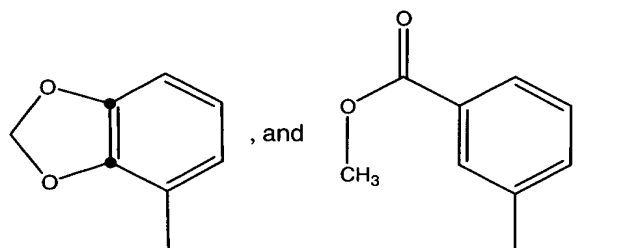
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R² is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkylamino, aryl, heteroaryl, heterocyclyl, carboxy, carboxy C₁-C₄ alkyl, C₁-C₄ alkoxy, hydroxy, hydroxy C₁-C₄ alkyl, hydroxy C₁-C₄ alkylamino, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkyl, C₁-C₄ alkoxy C₁-C₄ alkylamino, amino C₁-C₄ alkylamino, aryl C₁-C₄ alkyl, C₁-C₄ alkylamino C₁-C₄ alkyl, di C₁-C₄ alkylamino C₁-C₄ alkyl, C₁-C₄ alkyl C₁-C₄ alkyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkylcarbonyl, phthalamino C₁-C₄ alkyl, halo, carbamyl, C₁-C₄ alkylthio, C₁-C₄ alkoxyarylamino, C₁-C₁₀ mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from halogen, hydroxy, C₁-C₄ alkoxy, aryloxy, C₂-C₄ alkenyloxy, C₂-C₄ alkynyloxy, C₁-C₄ alkyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, C₁-C₄

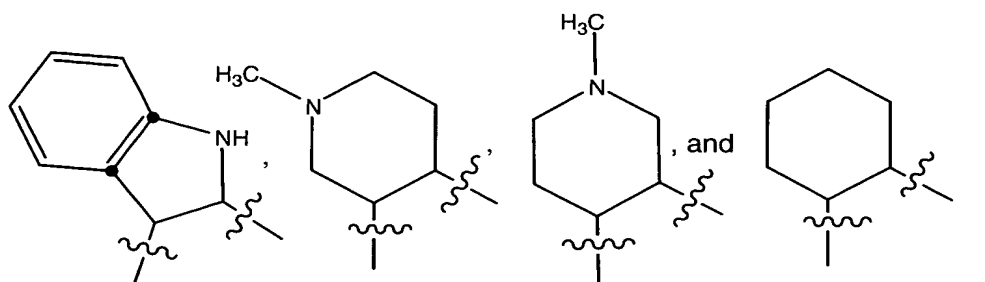
alkoxycarbonyl C<sub>1</sub>-C<sub>4</sub> alkoxy, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub>  
alkylamino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino,  
nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub>  
alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo  
5 C<sub>1</sub>-C<sub>4</sub> alkoxy,



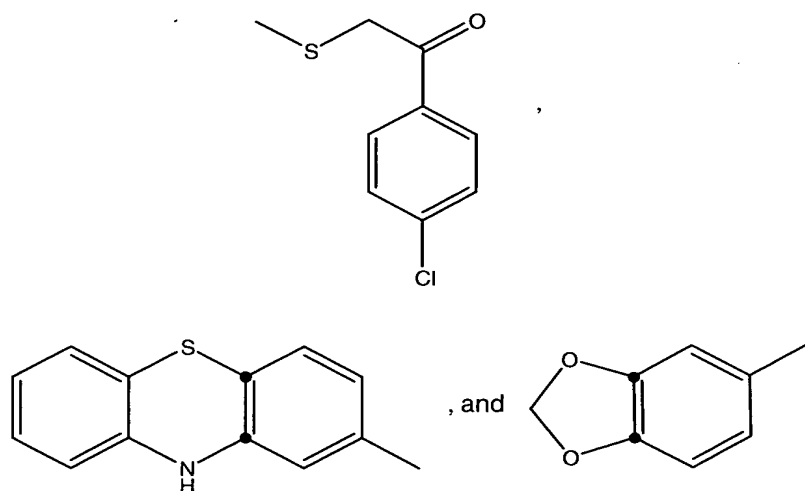
with the proviso that when R<sup>2</sup> is aryl, it is not substituted with nitro;

R<sup>3</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub>  
10 alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, cyano, amino C<sub>1</sub>-C<sub>4</sub> alkyl, amino, aryl, wherein the  
aryl group is optionally substituted with one or more group selected from  
halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy, C<sub>1</sub>-C<sub>4</sub>  
alkoxycarbonyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di- C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-  
C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano,  
15 halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy,  
di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, except that when R<sup>2</sup> is  
heteroaryl, R<sup>3</sup> is other than cyano, and

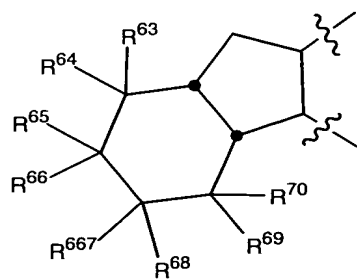
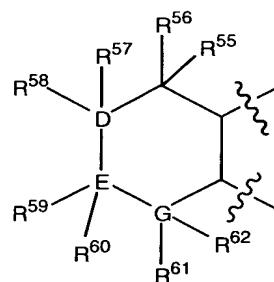
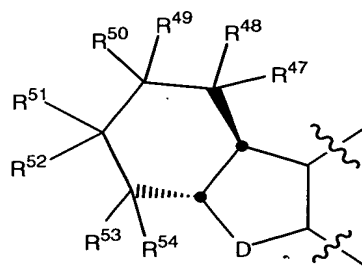
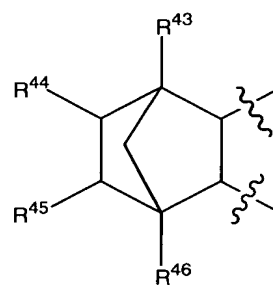
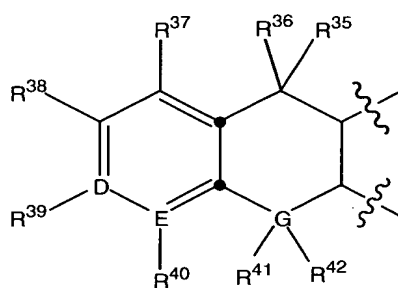
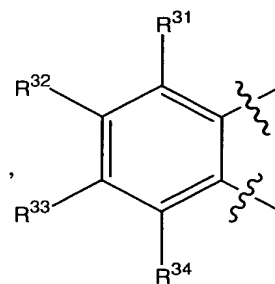
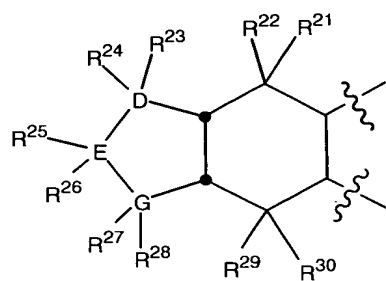
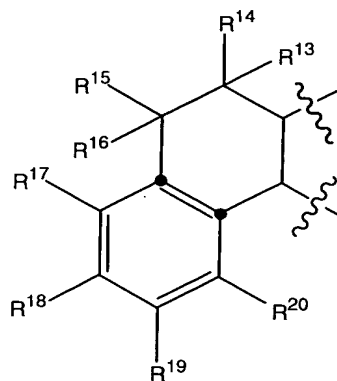
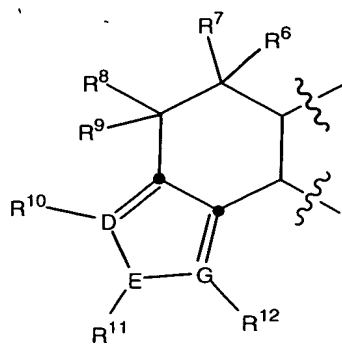
where the R<sup>2</sup> and R<sup>3</sup> groups are such that they optionally join to  
form a ring system selected from:



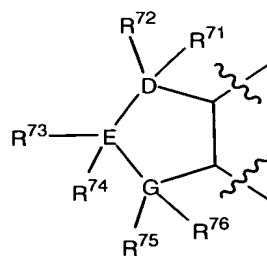
$R^4$  is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and heteroaryl groups are optionally substituted with one or more groups selected from halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, carboxy, carbamyl, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy



wherein the  $R^3$  and  $R^4$  groups are such that they optionally join to form a ring system selected from:



, and



;

D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

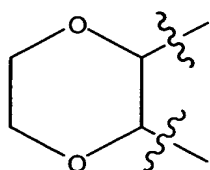
R<sup>5</sup> is selected from the group consisting of -H, and C<sub>1</sub>-C<sub>5</sub> alkyl, provided that at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> is other than hydrogen;

5 and

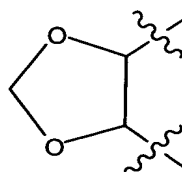
wherein the R<sup>1</sup> and R<sup>5</sup> groups optionally join to form a piperidyl ring or a oxaxinyl ring;

10 R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, R<sup>30</sup>, R<sup>31</sup>, R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup>, R<sup>36</sup>, R<sup>37</sup>, R<sup>38</sup>, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, R<sup>53</sup>, R<sup>54</sup>, R<sup>55</sup>, R<sup>56</sup>, R<sup>57</sup>, R<sup>58</sup>, R<sup>59</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup>, R<sup>63</sup>, R<sup>64</sup>, R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>70</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, and R<sup>76</sup> are each optionally present and are each independently selected from the group consisting of -H, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, amino, nitro, hydroxy, 15 C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkenoxy, oxo, carboxy, halo, halo C<sub>1</sub>-C<sub>4</sub> alkyl, dihalo C<sub>1</sub>-C<sub>4</sub> alkyl, trihalo C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, cyano C<sub>1</sub>-C<sub>4</sub> alkyl, dicyano C<sub>1</sub>-C<sub>4</sub> alkyl, halophenyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkoxy, - (CH<sub>2</sub>)-O-(C<sub>6</sub>H<sub>4</sub>)-O-(CH<sub>3</sub>), carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub> alkylamino, di C<sub>1</sub>-C<sub>4</sub> alkylamino, tri C<sub>1</sub>- 20 C<sub>4</sub> alkylamino, amino C<sub>1</sub>-C<sub>4</sub> alkoxy, diamino C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, di C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, cyano C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, -(CH<sub>2</sub>)-O-(CF<sub>2</sub>)-CHF<sub>2</sub>, tetra C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C<sub>1</sub>-C<sub>4</sub> alkoxy, pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, *N*-pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy, 25 carboxy C<sub>1</sub>-C<sub>4</sub> alkyl - ethyl ester, pyridyl C<sub>1</sub>-C<sub>4</sub> alkyl, pyridyl C<sub>1</sub>-C<sub>4</sub> alkoxy, - COO-CH<sub>2</sub>-CH<sub>3</sub>, with the proviso that when E is -N-, R<sup>38</sup> is other than cyano, and that when G is -N-, R<sup>36</sup> is -H; and

wherein R<sup>38</sup> and R<sup>39</sup> are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when  $R^1$ ,  $R^3$  and  $R^5$  are hydrogen:

$R^2$  is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl, (NZ<sub>1</sub>Z<sub>2</sub>)alkyl, or -R<sub>A</sub>R<sub>B</sub>;

where Z<sub>1</sub> and Z<sub>2</sub> are each independently selected from the group consisting of hydrogen, alkoxy carbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxy carbonyl, and formyl;

R<sup>A</sup> is selected from the group consisting of aryl and arylalkyl;

R<sup>B</sup> is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

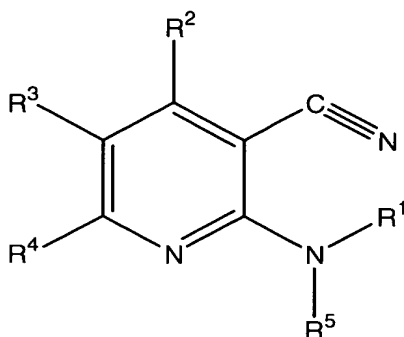
R<sup>4</sup> is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R<sub>C</sub>R<sub>D</sub>R<sub>E</sub>;

where R<sub>C</sub> is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R<sub>D</sub> is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl; and

R<sub>E</sub> is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.

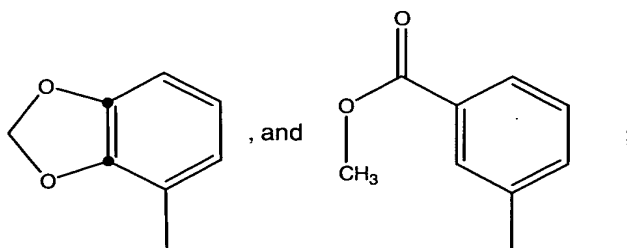
2. The compound according to claim 1, having the structure:



wherein:

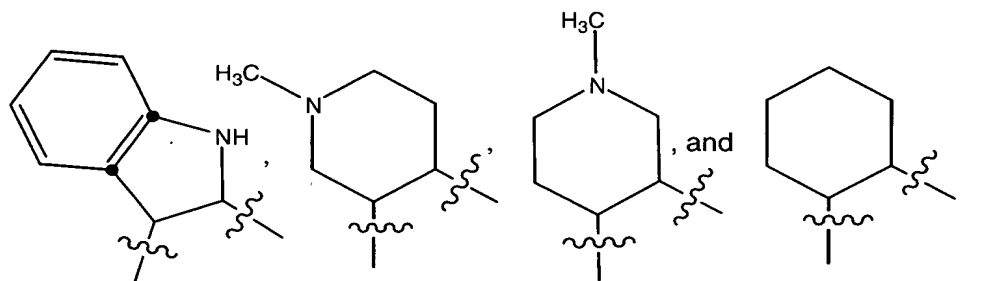
R<sup>1</sup> is selected from the group consisting of -H, methyl, ethyl, propyl, butyl, -(CH<sub>2</sub>)COOH, phenyl, pyridyl, dimethylaminoethyl, methoxyethyl, 5 tetramethylaminoethyl, carboxymethyl, and phenylacetyl;

R<sup>2</sup> is selected from the group consisting of -H, methyl, ethyl, propyl, butyl, amino, phenyl, methoxy, carboxy, carboxymethyl, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, 10 dimethylaminoethylamino, phthaloaminoethyl, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrrol, methyl-1,3-isodiazoyl, 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, -S(CH<sub>3</sub>), tetramethylaminoethyl, acetaminophenyl, methoxyphenylamino, carboxyphenyl, carboxy-3-isopyrrol, cyanophenyl, cyclopropyl, 15 phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl, trifluoromethylphenyl, trifluoromethylfluorophenyl, hydroxyphenyl, methylaminomethyl, methylaminoethyl, thiophyl, pyrrol, aminomethyl,



$R^3$  is selected from the group consisting of -H, methyl, ethyl, propyl, isopropyl, cyano, aminomethyl, phenyl, fluorophenyl, and amino, except that when  $R^2$  is pyrrol,  $R^3$  is other than cyano;

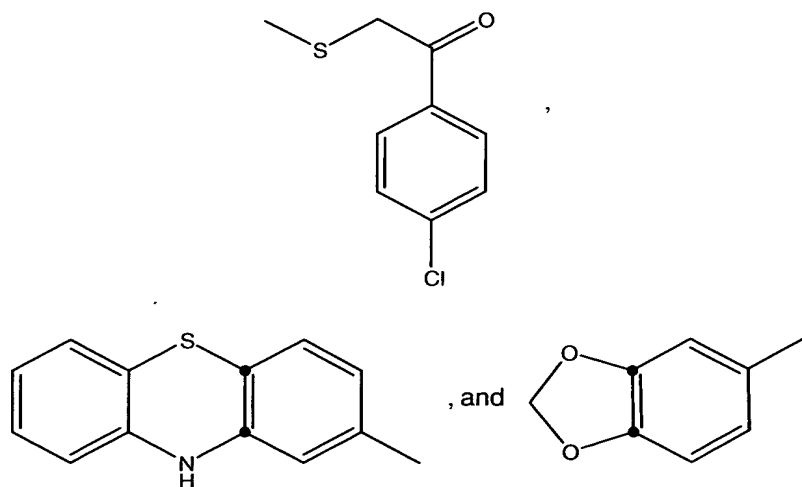
5            wherein the  $R^2$  and  $R^3$  groups are such that they optionally join to form a ring system selected from:



$R^4$  is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, bromophenyl, fluorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, mercapto, *N*-isoimidazolylphenyl, isopropyl, amino, hydroxynaphthyl, thiazoyl, carboxymethylphenyl, trifluoromethylphenyl, methylphenyl, cyanophenyl, dimethylphenyl, fluorobenzhydryl, methoxyfuryl, aminosulfonylphenyl,

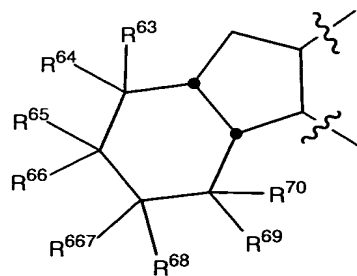
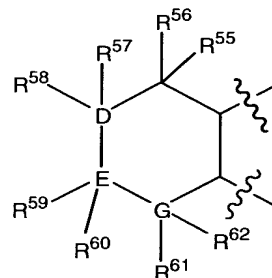
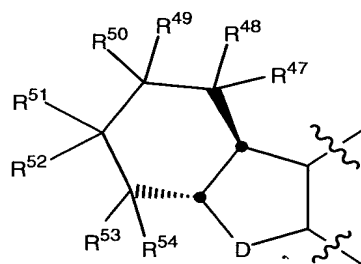
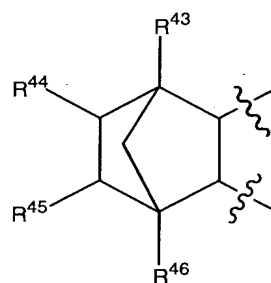
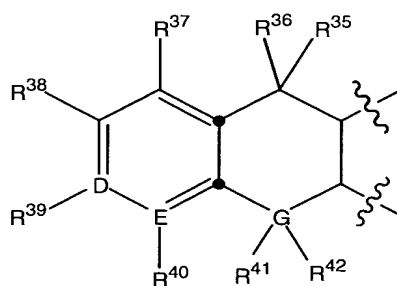
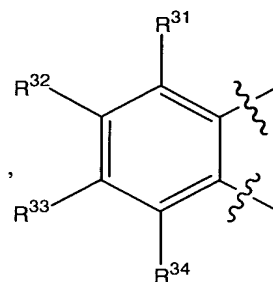
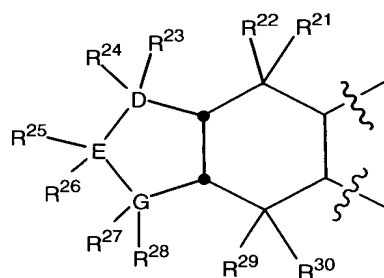
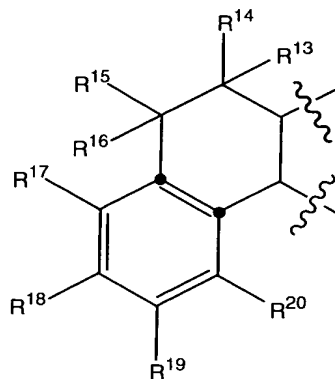
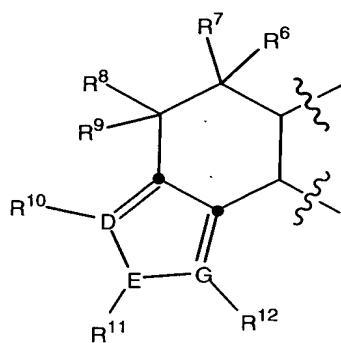
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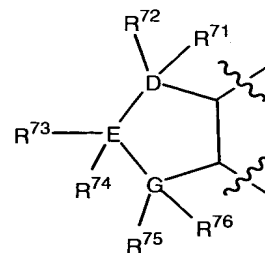




wherein the  $R^3$  and  $R^4$  groups are such that they optionally join to form a ring system selected from:



, and



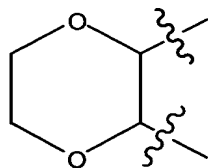
D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

5  $R^5$  is selected from the group consisting of -H, and  $C_1$ - $C_5$  alkyl, provided that at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is other than hydrogen; and

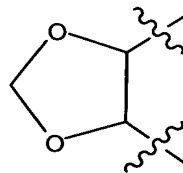
wherein the  $R^1$  and  $R^5$  groups optionally join to form a piperidyl ring;

10  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$ ,  $R^{25}$ ,  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ ,  $R^{31}$ ,  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ ,  $R^{40}$ ,  $R^{41}$ ,  $R^{42}$ ,  $R^{43}$ ,  $R^{44}$ ,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ ,  $R^{64}$ ,  $R^{65}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{68}$ ,  $R^{69}$ ,  $R^{70}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ , and  $R^{76}$  are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, propyl, butyl, isobutyl, amino, nitro, hydroxy, methoxy, ethoxy, 15 propoxy, 2-propenoxy, oxo, carboxy, bromo, chloro, fluoro, trifluoromethyl, chloromethyl, hydroxymethyl, dicyanomethyl, 2-fluorophenyl, 3-fluorophenyl, hydroxyethoxy, ethoxyethoxy,  $-(CH_2)-O-(C_6H_4)-O-(CH_3)$ , carboxymethoxy, isopropylcarboxymethoxy, isobutylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, 20 dimethylaminoethoxy, cyanomethoxymethyl, 2-propenoxymethyl, methoxymethyl, isopropoxymethyl, ethoxymethyl,  $-(CH_2)-O-(CF_2)-CHF_2$ , isobutoxymethyl, benzoyl, phenyl, *N*-morpholinyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, oxo, ethylcarboxy, carboxymethyl - ethyl ester, pyridylmethyl, 4-pyridylmethoxy, 2-pyridylmethyl, and  $-COO-$  25  $CH_2-CH_3$ , with the proviso that when G is -N-,  $R^{36}$  is -H; and

wherein  $R^{38}$  and  $R^{39}$  are such that they optionally join to form a ring system of the type selected from:



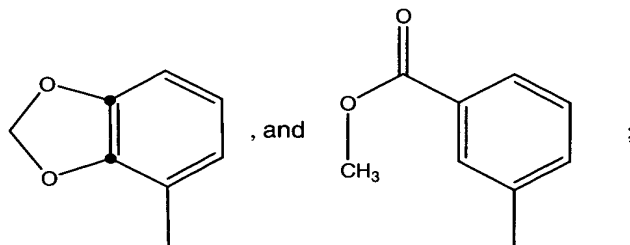
, and



3. The compound according to claim 2, wherein:

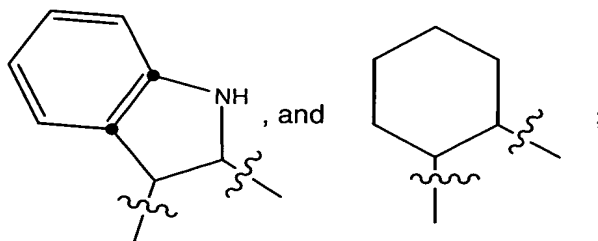
$R^1$  is selected from the group consisting of -H, methyl, ethyl, -  
(CH<sub>2</sub>)COOH, and phenyl;

5  $R^2$  is selected from the group consisting of -H, methyl, ethyl, amino, phenyl, methoxy, carboxy, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl,  
10 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, -S(CH<sub>3</sub>), acetylaminophenyl, methoxyphenylamino, carboxyphenyl, cyanophenyl, cyclopropyl, phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl, trifluoromethylphenyl, trifluoromethylfluorophenyl, hydroxyphenyl,



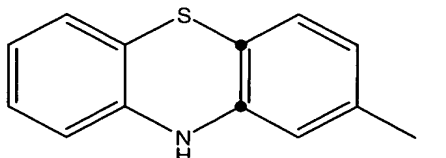
15  $R^3$  is selected from the group consisting of -H, methyl, ethyl, propyl, isopropyl, cyano, and aminomethyl;

wherein the  $R^2$  and  $R^3$  groups are such that they optionally join to form a ring system selected from:

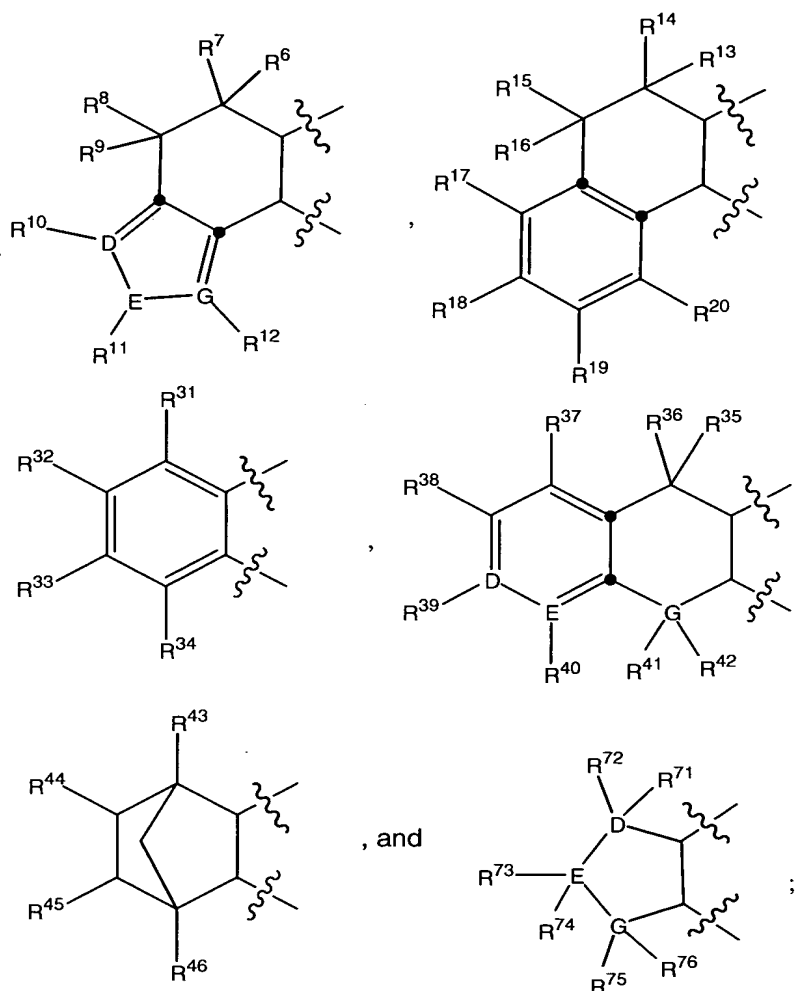


20  $R^4$  is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl,

- hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, *N*-isoimidazolylphenyl, amino, hydroxynaphthyl, thiazoyl, carboxymethylphenyl, aminosulfonylphenyl, and
- 5



wherein the  $R^3$  and  $R^4$  groups are such that they can join to form a ring system selected from:



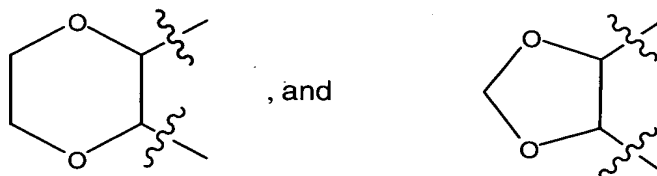
D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

5 R<sup>5</sup> is selected from the group consisting of -H, and C<sub>1</sub>-C<sub>5</sub> alkyl, provided that at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> is other than hydrogen;

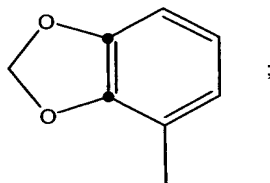
R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>31</sup>, R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup>, R<sup>36</sup>, R<sup>37</sup>, R<sup>38</sup>, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, and R<sup>76</sup> are each optionally present and are each

10 independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, chloro, fluoro, trifluoromethyl, chloromethyl, hydroxymethyl,

- 5 dicyanomethyl, hydroxyethoxy, ethoxyethoxy,  $-(CH_2)-O-(C_6H_4)-O-(CH_3)$ ,  
carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino,  
aminoethoxy, diaminoethoxy, cyanomethoxymethyl, methoxymethyl,  
isopropoxymethyl, ethoxymethyl,  $-(CH_2)-O-(CF_2)-CHF_2$ , isobutoxymethyl,  
phenyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and  
pyridylmethyl, with the proviso that when G is -N-,  $R^{36}$  is -H; and  
wherein  $R^{38}$  and  $R^{39}$  are such that they optionally join to form a ring  
system of the type selected from:

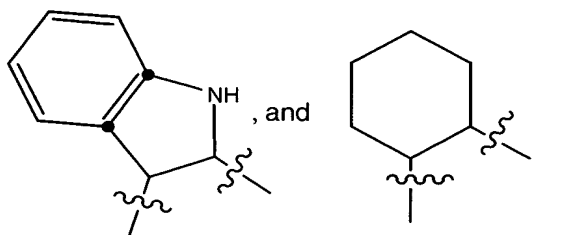


- 10 4. The compound according to claim 2, wherein:  
 $R^1$  is selected from the group consisting of -H, methyl, and ethyl;  
 $R^2$  is selected from the group consisting of -H, methyl, amino,  
phenyl, methoxy, hydroxyethylamino, propylamino, ethylamino,  
methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino,  
15 benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl,  
chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl,  
1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl,  $-S(CH_3)$ , acetaminophenyl,  
methoxyphenylamino, carboxyphenyl, cyanophenyl, cyclopropyl,  
phenoxyphenyl, pyridyl, dihydroxybromophenyl, difluoromethoxyphenyl,  
20 and



$R^3$  is selected from the group consisting of -H, methyl, ethyl, propyl,  
isopropyl, and cyano;

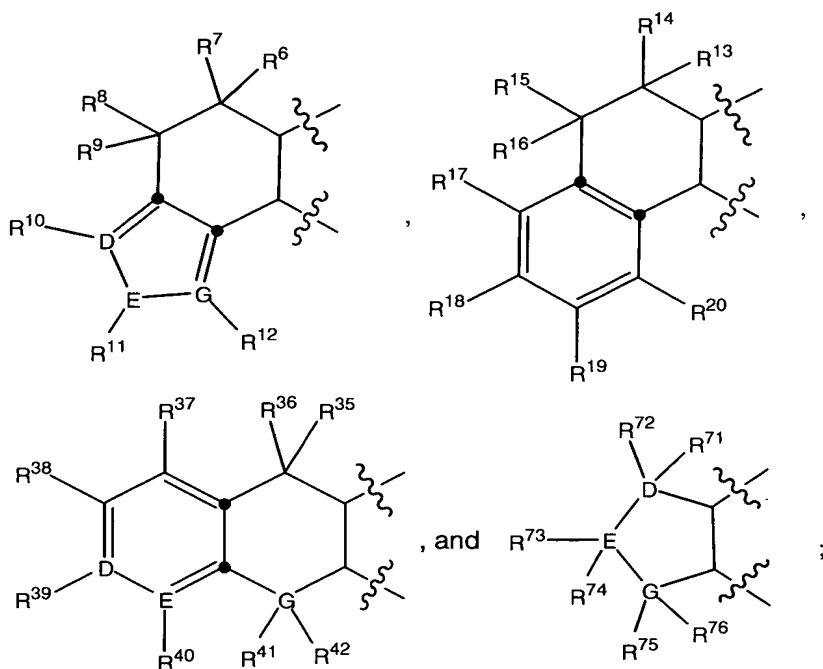
wherein the  $R^2$  and  $R^3$  groups are such that they optionally join to form a ring system selected from:



- 5  $R^4$  is selected from the group consisting of -H, methyl, ethyl, propyl, hydroxy, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, methoxy, carbamylphenyl, amino, and
- 10 aminosulfonylphenyl;

wherein the  $R^3$  and  $R^4$  groups are such that they optionally join to form a ring system selected from:



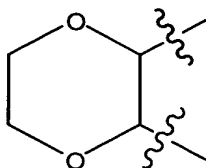


D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

$R^5$  is -H, provided that at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is other than hydrogen;

$R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ ,  $R^{40}$ ,  $R^{41}$ ,  $R^{42}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ , and  $R^{76}$  are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy,  $-(CH_2)-O-(C_6H_4)-O-(CH_3)$ , carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, phenyl, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-,  $R^{36}$  is -H; and

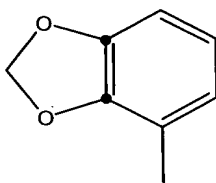
wherein  $R^{38}$  and  $R^{39}$  are such that they can join to form a ring system consisting of:



5. The compound according to claim 2, wherein:

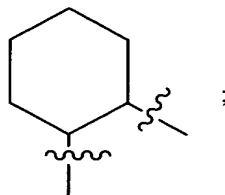
$R^1$  is selected from the group consisting of -H, methyl, and ethyl;

5  $R^2$  is selected from the group consisting of -H, methyl, amino, phenyl, methoxy, hydroxyethylamino, propylamino, ethylamino, methylamino, methoxyethyl, ethoxyethylamino, aminoethylamino, benzylamino, dimethylaminoethylamino, fluorophenyl, difluorophenyl, chlorophenyl, bromophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl,  
10 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, -S(CH<sub>3</sub>), acetaminophenyl, methoxyphenylamino, carboxyphenyl, and



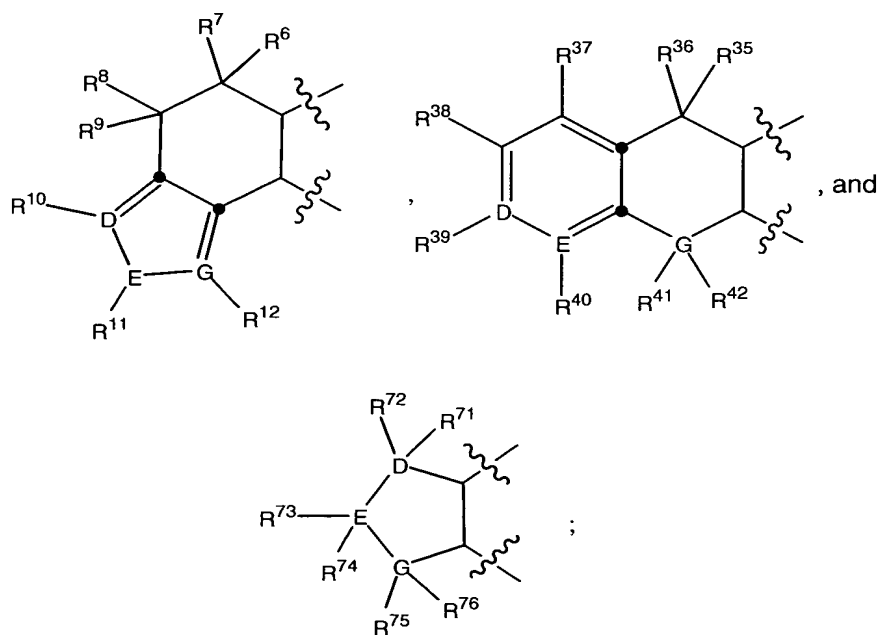
$R^3$  is selected from the group consisting of -H, methyl, ethyl, propyl, and isopropyl;

15 wherein the  $R^2$  and  $R^3$  groups are optionally such that they join to form:



5  $R^4$  is selected from the group consisting of -H, methyl, ethyl, propyl, furyl, indolyl, methylfuryl, methylimidazolyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dichlorophenyl, dihydroxyborophenyl, thienyl, pyrrol, *N*-methylpyrrol, pyridyl, methylthio, methylsulfonylphenyl, carboethoxyphenyl, and aminosulfonylphenyl;

wherein the  $R^3$  and  $R^4$  groups are such that they optionally join to form a ring system selected from:



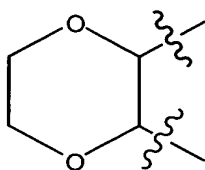
10 D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

$R^5$  is -H, provided that at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is other than hydrogen;

15  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ ,  $R^{40}$ ,  $R^{41}$ ,  $R^{42}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ , and  $R^{76}$  are each optionally present and are each independently selected from the group consisting of - H, methyl, ethyl, butyl, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy, carboxymethoxy, isopropylcarboxymethoxy,

methylamino, dimethylamino, aminoethoxy, diaminoethoxy, morpholinylethoxy, pyrrolidylethoxy, *N*-pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-, R<sup>36</sup> is -H; and

5                    wherein R<sup>38</sup> and R<sup>39</sup> are such that they optionally join to form a ring system consisting of: .



6.        The compound according to claim 2, wherein:

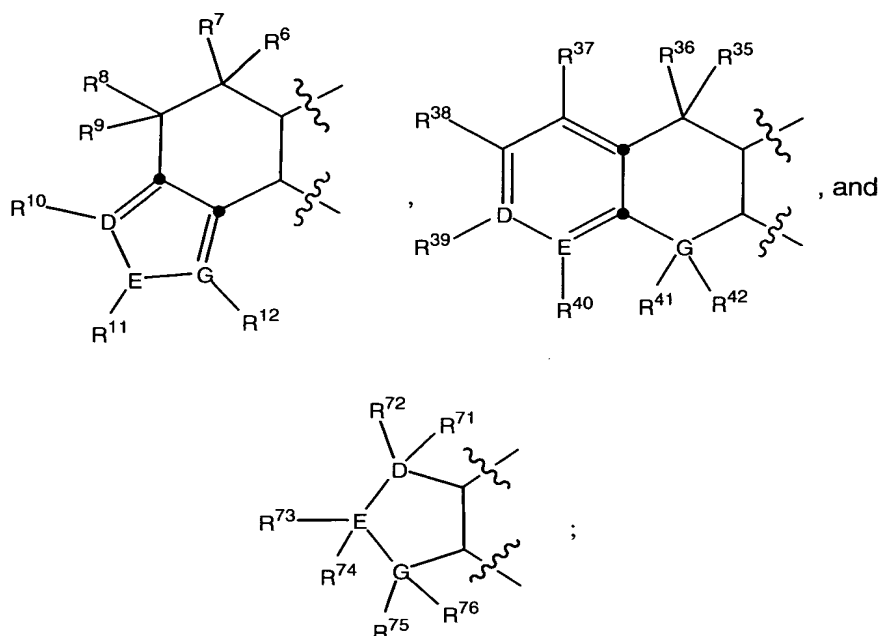
R<sup>1</sup> is -H;

10           R<sup>2</sup> is selected from the group consisting of amino, phenyl, fluorophenyl, difluorophenyl, furyl, carbamylpyrryl, methyl-1,3-isodiazoyl, 1,3-isodiazoyl, 1,3,4-triazoyl, methoxyphenyl, acetylamino, methoxyphenylamino, and carboxyphenyl;

R<sup>3</sup> is selected from the group consisting of -H, methyl, ethyl, and propyl;

15           R<sup>4</sup> is selected from the group consisting of methyl, ethyl, propyl, furyl, phenyl, hydroxyphenyl, carboxyphenyl, pyrazolyl, hydroxy, dihydroxyphenyl, methoxyphenyl, chlorophenyl, dihydroxyborophenyl, and aminosulfonylphenyl;

20           wherein the R<sup>3</sup> and R<sup>4</sup> groups are such that they optionally join to form a ring system selected from:

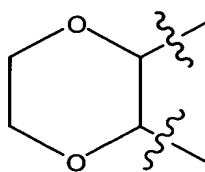


D, E and G are each independently selected from the group consisting of carbon, oxygen, sulfur, and nitrogen;

R<sup>5</sup> is -H, provided that at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> is other than hydrogen;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>35</sup>, R<sup>36</sup>, R<sup>37</sup>, R<sup>38</sup>, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, and R<sup>76</sup> are each optionally present and are each independently selected from the group consisting of - H, amino, nitro, hydroxy, methoxy, ethoxy, oxo, 2-propenoxy, carboxy, bromo, fluoro, trifluoromethyl, chloromethyl, dicyanomethyl, hydroxyethoxy, ethoxyethoxy, carboxymethoxy, isopropylcarboxymethoxy, methylamino, dimethylamino, aminoethoxy, diaminoethoxy, morpholinylethoxy, pyrrolidylethoxy, and pyridylmethyl, with the proviso that when G is -N-, R<sup>36</sup> is -H; and

wherein R<sup>38</sup> and R<sup>39</sup> optionally are such that they optionally join to form:



7. The compound according to claim 2, wherein the aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

- 5 2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
10 8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,  
2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
15 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,  
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
20 2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile, 2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,  
25 2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,  
2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,  
2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
30 2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,  
2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

- 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
- 2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,
- 4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,
- 5 2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,
- 2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
- 2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,
- 2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,
- 4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,
- 10 2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
- 2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,
- N*-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,
- 2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,
- 15 2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,
- 2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
- 2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile,
- 2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,
- 2-amino-4-(2-furyl)-6-(1H-pyrazol-4-yl)nicotinonitrile,
- 20 2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
- 2-amino-4-(2,5-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
- 2-amino-4-(4-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,
- 25 2-amino-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,
- 4,6-diamino-2-(chloromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
- 2-amino-4-(1H-imidazol-4-yl)-6-phenylnicotinonitrile,
- 30 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzenesulfonamide,
- 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,
- 2-amino-6-(4-methoxyphenyl)-4-(4H-1,2,4-triazol-3-yl)nicotinonitrile,

- 2-amino-4-(2-fluorophenyl)-6-(3-furyl)nicotinonitrile,  
2-amino-6-(2-furyl)-4-(methylthio)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
8-amino-6-(2-furyl)-4,5-dihydro-2H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
5 2-amino-4-(2-bromophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,  
2-amino-4-phenyl-6-thien-2-ylnicotinonitrile,  
2-amino-4-(3-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
10 2-amino-4-(2-furyl)-7-methyl-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
15 2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-3-yl)nicotinonitrile,  
3-amino-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
*N*-[4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-  
yl)phenyl]acetamide,  
6-amino-4-[(4-methoxyphenyl)amino]-2-(trifluoromethyl)-2,3-  
20 dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]-*N*-(tert-  
butyl)benzenesulfonamide,  
4,6-diamino-2-ethyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
6-amino-4-(2-furyl)-2,4'-bipyridine-5-carbonitrile,  
25 2,4-diamino-6-(methylthio)nicotinonitrile,  
3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic  
acid,  
2-amino-6-(4-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(1,3-benzodioxol-4-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-  
30 3-carbonitrile,  
4,6-diamino-2-methyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(1H-imidazol-5-yl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,



- 2,4-diaminoquinoline-3-carbonitrile,  
2,8-diamino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4,6-di(2-furyl)nicotinonitrile,  
4,6-diamino-2-butyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
5 ethyl 4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoate,  
2,4-diamino-6-methoxynicotinonitrile,  
2-amino-4-methylnicotinonitrile,  
2-amino-4-(4-cyanophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
10 2-amino-4-cyclopropyl-6-methylnicotinonitrile,  
2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-2-yl)nicotinonitrile,  
2-amino-4-(2-chlorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-6-(2-furyl)-4-(4-phenoxyphenyl)nicotinonitrile,  
15 2-amino-4-pyridin-3-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-6-[[2-(4-chlorophenyl)-2-oxoethyl]thio]-4-(2-furyl)pyridine-3,5-  
dicarbonitrile,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,  
20 2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-4-yl)nicotinonitrile,  
4-(6-amino-5-cyano-4-phenylpyridin-2-yl)-N-(tert-  
butyl)benzenesulfonamide,  
2-amino-4-methoxynicotinonitrile,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]benzoic acid,  
25 4,6-diamino-2-[(4-methoxyphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-  
5-carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,  
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]-N-(tert-  
butyl)benzenesulfonamide,  
30 (2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,  
3-Pyridinecarbonitrile, 2-Amino-4-Methylm  
2-amino-6-(2-furyl)nicotinonitrile,

- 2-amino-4-(2-furyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzamide,  
2-amino-4-(2-furyl)-7-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,  
5 2-amino-4-pyridin-4-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-4-(3-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,  
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
10 2-amino-4-(2-furyl)-6-thien-3-ylnicotinonitrile,  
2-amino-4-(3-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,  
2,4-diamino-6-propylpyridine-3,5-dicarbonitrile,  
4,6-diamino-2-[(prop-2-ynyloxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-  
15 carbonitrile,  
4,6-diamino-2-(hydroxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-  
carbonitrile,  
2-amino-6-(2-furyl)-4-[4-(trifluoromethyl)phenyl]nicotinonitrile,  
5-amino-7-methylthieno[3,2-b]pyridine-6-carbonitrile,  
20 2-amino-4-(2-furyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-  
3-carbonitrile,  
*N*-[3-cyano-4-(2-fluorophenyl)-6-(2-furyl)pyridin-2-yl]glycine,  
2-[(allyloxy)methyl]-4,6-diamino-2,3-dihydrofuro[2,3-b]pyridine-5-  
carbonitrile,  
25 2-amino-4-(2-furyl)-6-methyl-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
4,6-diamino-2-(methoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-  
carbonitrile,  
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-[4-(1H-imidazol-1-yl)phenyl]nicotinonitrile,  
30 2-amino-4-(2-furyl)-6-(4-hydroxyphenyl)nicotinonitrile,  
2-amino-4-(2-furyl)-5,6,7,8-tetrahydro-5,8-methanoquinoline-3-carbonitrile,

- 4,6-diamino-2-(isopropoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
3-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,  
4,6-diamino-2-(ethoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
5 2-amino-4-(4-bromophenyl)-6-(2-furyl)nicotinonitrile,  
4,6-diamino-2-[(1,1,2,2-tetrafluoroethoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-[2-fluoro-4-(trifluoromethyl)phenyl]-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-methoxyphenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
10 carbonitrile,  
2-amino-4-(2-fluorophenyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
3,6-diamino-4-ethyl-1H-pyrazolo[3,4-b]pyridine-5-carbonitrile,  
6-amino-4-(2-furyl)-2,2'-bipyridine-5-carbonitrile,  
15 2-amino-4-(2-furyl)-6-(8-hydroxy-1-naphthyl)nicotinonitrile,  
4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic acid,  
2-amino-6-(3,4-dichlorophenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(10H-phenothiazin-2-yl)nicotinonitrile,  
20 sodium 2-amino-3-cyano-4-quinolinecarboxylate,  
2-anilino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(3-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(4-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
4,6-diamino-2-(tert-butoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-  
25 carbonitrile,  
2-amino-4-(2-furyl)-6-(1,3-thiazol-2-yl)nicotinonitrile,  
4-(2-fluorophenyl)-6-(2-furyl)-2-piperidin-1-ylnicotinonitrile,  
2-amino-6-(4-chlorophenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-6-(4-hydroxyphenyl)-4-(2-methoxyphenyl)nicotinonitrile,  
30 2-amino-6-(2-furyl)-4-(2-hydroxyphenyl)nicotinonitrile,  
methyl 3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoate,

- 2-amino-4-(2-chlorophenyl)-6-(5-methyl-2-furyl)nicotinonitrile,  
3,6-diamino-2-benzoylthieno[2,3-b]pyridine-5-carbonitrile,  
methyl 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoate,  
2-aminonicotinonitrile,
- 5 2-amino-4-(2-furyl)-8-[[2-(trimethylsilyl)ethoxy]methyl]-6,8-dihydro-5H-  
pyrazolo[3,4-h]quinoline-3-carbonitrile,  
3-amino-5H-pyrido[4,3-b]indole-4-carbonitrile,  
2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic  
acid,
- 10 2-amino-6-(4-methoxyphenyl)-4-phenylnicotinonitrile,  
2-amino-4-(2-furyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-6-isobutylnicotinonitrile,  
2-amino-6-benzyl-4-(2-furyl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-methyl-5-phenylnicotinonitrile,
- 15 2-amino-4-(2-furyl)-6-[4-(trifluoromethoxy)phenyl]nicotinonitrile,  
2-amino-4-(2-furyl)-6-propyl-5,6,7,8-tetrahydro-1,6-naphthyridine-3-  
carbonitrile,  
2-amino-4-(2-furyl)benzo[h]quinoline-3-carbonitrile,  
2-amino-6-(4-methoxyphenyl)-4-thien-2-yl nicotinonitrile,
- 20 2-amino-4-(2-fluorophenyl)-6-tetrahydrofuran-2-yl nicotinonitrile,  
ethyl 6-amino-5-cyano-4-(2-furyl)pyridine-2-carboxylate,  
2-amino-4-(2-furyl)-9-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-8-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-8,9-dimethoxy-5,6-dihydrobenzo[h]quinoline-3-  
carbonitrile,
- 25 2-amino-4-(2-furyl)-7-methoxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-7,9-dimethyl-5,6-dihydrobenzo[h]quinoline-3-  
carbonitrile,  
ethyl 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoate,
- 30 2-amino-6-(3-bromophenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-[4-(trifluoromethyl)phenyl]nicotinonitrile,  
2-amino-4-(2-furyl)-6-[3-(trifluoromethyl)phenyl]nicotinonitrile,

- 2-amino-4-(2-furyl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,  
4,6-diamino-2-(phenoxymethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-  
carbonitrile,  
4,6-diamino-3-phenyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
5 4,6-diamino-3-vinyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(2-fluorophenyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
3-amino-1-methyl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
2-amino-4-(2-fluorophenyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-  
10 h]quinoline-3-carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
2-(benzylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
15 2-amino-4-(2-furyl)-6,7-dihydro-5H-benzo[6,7]cyclohepta[1,2-b]pyridine-3-  
carbonitrile,  
2-amino-4-(2-furyl)-5H-indeno[1,2-b]pyridine-3-carbonitrile,  
3-amino-1-methyl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
20 2-amino-4-(2-thienyl)-5,6,7,8-tetrahydro-3-quinolinecarbonitrile,  
2-amino-4-(3-fluorophenyl)-5,6,7,8-tetrahydro-3-quinolinecarbonitrile,  
2-(1-piperidinyl)-6-(2-thienyl)-4-(trifluoromethyl)nicotinonitrile,  
2-(dimethylamino)-6-(2-thienyl)-4-(trifluoromethyl)nicotinonitrile,  
3-Quinolinecarbonitrile,  
25 2-amino-4-methyl- or 2-amino-4-methyl-3-quinolinecarbonitrile,  
2-amino-4-(4-methoxyphenyl)-6-(2-thienyl)nicotinonitrile,  
2-amino-6-cyclopropyl-4-(2-methoxyphenyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-phenylnicotinonitrile,  
(4bS,8aR)-2,4-diamino-4b,5,6,7,8,8a-hexahydro[1]benzofuro[2,3-  
30 b]pyridine-3-carbonitrile,  
2-amino-4-(2-fluorophenyl)-5,5-dimethyl-6,8-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,

- 2-amino-4-(2-furyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
3-amino-1,6-dimethyl-5,6,7,8-tetrahydro-2,6-naphthyridine-4-carbonitrile,  
3-amino-1,7-dimethyl-5,6,7,8-tetrahydro-2,7-naphthyridine-4-carbonitrile,  
5 2-amino-4-(2-fluorophenyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2-fluorophenyl)-5-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
4,6-diamino-2-(morpholin-4-ylmethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
10 ethyl (4,6-diamino-5-cyano-2-oxo-2,3-dihydro-1H-pyrrolo[2,3-b]pyridin-1-yl)acetate,  
2-amino-4-(2-methoxyphenyl)-6-(5-methyl-2-furyl)nicotinonitrile,  
2-amino-6-methyl-4-(4-nitrophenyl)nicotinonitrile,  
15 2-amino-4-(3,4-dimethoxyphenyl)-6-(5-methyl-2-furyl)nicotinonitrile,  
2,4-diamino-6-[(4-methoxyphenyl)thio]nicotinonitrile,  
4,6-diamino-2-(phenoxyethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
4,6-diamino-3-phenyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
20 4,6-diamino-2-[(2-methylphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(2-furyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-4-(3-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-cyclopenta[b]pyridine-3-carbonitrile,  
25 2-amino-9-ethyl-9H-pyrido[2,3-b]indole-3-carbonitrile,  
2-amino-6-isobutyl-4-(4-methylphenyl)nicotinonitrile,  
1-(2-furyl)-3-[(3-hydroxypropyl)amino]-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
30 2-azepan-1-yl-6-(4-fluorophenyl)-4-phenylnicotinonitrile,  
2-amino-6-tert-butyl-4-(4-methylphenyl)nicotinonitrile,  
2-amino-4-(4-bromophenyl)-6-methylnicotinonitrile,

- 2-amino-4-thien-2-yl-5,6,7,8,9,10-hexahydrocycloocta[b]pyridine-3-carbonitrile,  
2-amino-4-(4-chlorophenyl)-6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridine-3-carbonitrile,  
5 2-(allylamino)-5-amino-7-(4-bromophenyl)thieno[3,2-b]pyridine-3,6-dicarbonitrile,  
2-amino-4-pyridin-3-yl-5,6,7,8,9,10-hexahydrocycloocta[b]pyridine-3-carbonitrile,  
2-amino-4-(4-bromophenyl)-6-tert-butyl nicotinonitrile,  
10 1-(2-furyl)-3-morpholin-4-yl-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
2-amino-4-(4-methylphenyl)-6,7-dihydro-5H-cyclopenta[b]pyridine-3-carbonitrile,  
2-amino-7,7-dimethyl-7,8-dihydro-5H-pyrano[4,3-b]pyridine-3-carbonitrile,  
2-amino-6-isobutyl-4-(4-methoxyphenyl)nicotinonitrile,  
15 4,6-diamino-2-oxo-1-phenyl-2,3-dihydro-1H-pyrrolo[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(2-methoxyphenyl)-5,6-dimethylnicotinonitrile,  
2-(dimethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-(dimethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
20 4-(2-fluorophenyl)-6-(2-furyl)-2-(methylamino)nicotinonitrile,  
4-(2-fluorophenyl)-6-(2-furyl)-2-morpholin-4-yl nicotinonitrile,  
tert-butyl N-[3-cyano-4-(2-fluorophenyl)-6-(2-furyl)pyridin-2-yl]glycinate,  
2-(ethylamino)-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
ethyl 4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoate,  
25 2-amino-6-(2-fluorophenyl)-4-(3-furyl)nicotinonitrile,  
6-amino-4-(2-fluorophenyl)-2,2'-bipyridine-5-carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-thien-2-yl nicotinonitrile,  
ethyl 6-amino-5-cyano-4-(2-fluorophenyl)pyridine-2-carboxylate,  
2-amino-6-(2-furyl)-4-phenylnicotinonitrile,  
30 ethyl 2-amino-3-cyano-4-(2-furyl)-5,6,7,8-tetrahydroquinoline-6-carboxylate,  
2-amino-4-(2-furyl)-6-(4-hydroxyphenyl)-5-methylnicotinonitrile,

- 2-amino-4-(2-furyl)-6-(4-methoxyphenyl)-5-methylnicotinonitrile,  
2-amino-6-(4-fluorophenyl)-4-(2-furyl)-5-methylnicotinonitrile,  
2-amino-4-(2-furyl)-5,6-diphenylnicotinonitrile,  
2-amino-4-(2-furyl)-5-methyl-6-phenylnicotinonitrile,  
5 2-amino-6-(3,4-dimethylphenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-6-(4-fluorophenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-4-(3-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
6-amino-4-(3-fluorophenyl)-2,4'-bipyridine-5-carbonitrile,  
6-amino-4-(2-fluorophenyl)-2,4'-bipyridine-5-carbonitrile,  
10 2-amino-4-butyl-6-methylnicotinonitrile,  
2-amino-6-methyl-4-propylnicotinonitrile,  
2-amino-4-ethyl-6-methylnicotinonitrile, 2-amino-4,6-dimethylnicotinonitrile,  
2-amino-4-[2-(hexyloxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
15 2-amino-4-[2-(beta-D-glucopyranosyloxy)phenyl]-6,7-dihydro-5H-  
pyrazolo[3,4-h]quinoline-3-carbonitrile,  
4-[2-(allyloxy)phenyl]-2-amino-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
methyl [2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-  
20 yl)phenoxy]acetate,  
2-amino-4-(2-ethoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
ethyl 4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxylate,  
2-amino-6-methylnicotinonitrile,  
25 2-amino-6-(4-cyanophenyl)-4-(2-furyl)nicotinonitrile,  
2-amino-6-(4-fluorobenzyl)-4-(2-furyl)nicotinonitrile,  
2-amino-5-(4-fluorophenyl)-4-(2-furyl)-6-methylnicotinonitrile,  
2-amino-4-(2-furyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-4-(2-methylphenyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,  
30 2-amino-4-(4-methoxyphenyl)-5,6,7,8-tetrahydroquinoline-3-carbonitrile,  
2-amino-4-phenyl-5,6,7,8-tetrahydroquinoline-3-carbonitrile,  
2-amino-6-(4-methoxyphenyl)-4-(2-methylphenyl)nicotinonitrile,



- 2-amino-4,6-bis(4-methoxyphenyl)nicotinonitrile,  
2-amino-4-(3-chlorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-4-(2-chlorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-4-(2-furyl)-5,6,7,8-tetrahydro-1,6-naphthyridine-3-carbonitrile,  
5 2-amino-4-(2-furyl)-6-(4-methylphenyl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-phenylnicotinonitrile,  
6-amino-4-(2-furyl)-2,3'-bipyridine-5-carbonitrile,  
2-amino-6-(1,3-benzodioxol-5-yl)-4-(2-furyl)nicotinonitrile,  
2-amino-4-isoquinolin-4-yl-6-(4-methoxyphenyl)nicotinonitrile,  
10 2-amino-4-(1-benzothien-3-yl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-6-(4-methoxyphenyl)-4-thien-3-ylnicotinonitrile,  
2-amino-4-(3-furyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-6-(4-methoxyphenyl)-4-(1H-pyrrol-2-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,  
15 2'-amino-6'-(4-methoxyphenyl)-3,4'-bipyridine-3'-carbonitrile,  
2-amino-4-[2-(trifluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-5H-thiochromeno[4,3-b]pyridine-3-carbonitrile,  
2-amino-4-{4-[(2-cyanoethyl)(methyl)amino]phenyl}-6,7-dihydro-5H-  
20 pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-[2-(2-hydroxyethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
2-amino-4-(2-methylphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
25 2-amino-4-[4-(dimethylamino)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-  
h]quinoline-3-carbonitrile,  
2-amino-4-(1H-indol-7-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
methyl 4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-  
30 yl)benzoate,  
methyl 2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-  
yl)benzoate,

[2-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)phenoxy]acetic acid,

2-amino-6-phenylnicotinonitrile,

2-amino-6-cyclohexylnicotinonitrile,

5 2-amino-4-(2-furyl)-6-(1-trityl-1H-pyrazol-4-yl)nicotinonitrile, and

2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,

8. The compound according to claim 1, wherein the

aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

10 2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

15 8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,

2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,

4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,

2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

20 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,

8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,

2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

25 2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,

2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile, 2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,

2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,

30 2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,

2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,

- 2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic acid,  
2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,  
5 2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile, 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,  
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,  
10 2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,  
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,  
2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,  
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,  
4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,  
15 2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,  
*N*-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,  
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,  
20 2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,  
2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(1H-pyrazol-4-yl)nicotinonitrile,  
25 2-amino-4-(4-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2,5-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(4-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
30 2-amino-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,

- 4,6-diamino-2-(chloromethyl)-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
2-amino-4-(1H-imidazol-4-yl)-6-phenylnicotinonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzenesulfonamide,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenylboronic acid,  
5 2-amino-6-(4-methoxyphenyl)-4-(4H-1,2,4-triazol-3-yl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(3-furyl)nicotinonitrile,  
2-amino-6-(2-furyl)-4-(methylthio)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
8-amino-6-(2-furyl)-4,5-dihydro-2H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
10 2-amino-4-(2-bromophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,  
2-amino-4-phenyl-6-thien-2-yl nicotinonitrile,  
2-amino-4-(3-methoxyphenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
15 2-amino-4-(2-furyl)-7-methyl-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-4-(2-fluorophenyl)-6-(1H-pyrrol-2-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-5-methyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
20 2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-3-yl)nicotinonitrile,  
3-amino-5,6,7,8-tetrahydroisoquinoline-4-carbonitrile,  
N-[4-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-  
yl)phenyl]acetamide,  
6-amino-4-[(4-methoxyphenyl)amino]-2-(trifluoromethyl)-2,3-  
25 dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]-N-(tert-  
butyl)benzenesulfonamide,  
4,6-diamino-2-ethyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,  
6-amino-4-(2-furyl)-2,4'-bipyridine-5-carbonitrile,  
30 2,4-diamino-6-(methylthio)nicotinonitrile,  
3-(2-amino-3-cyano-6,7-dihydro-5H-pyrazolo[3,4-h]quinolin-4-yl)benzoic  
acid,

- 2-amino-6-(4-chlorophenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(1,3-benzodioxol-4-yl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-  
3-carbonitrile, 4,6-diamino-2-methyl-2,3-dihydrofuro[2,3-b]pyridine-5-  
carbonitrile,
- 5 2-amino-4-(1H-imidazol-5-yl)-6-[4-(methylsulfonyl)phenyl]nicotinonitrile,  
2,4-diaminoquinoline-3-carbonitrile,  
2,8-diamino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4,6-di(2-furyl)nicotinonitrile,  
4,6-diamino-2-butyl-2,3-dihydrofuro[2,3-b]pyridine-5-carbonitrile,
- 10 ethyl 4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoate,  
2,4-diamino-6-methoxynicotinonitrile,  
2-amino-4-methylnicotinonitrile,  
2-amino-4-(4-cyanophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,
- 15 2-amino-4-cyclopropyl-6-methylnicotinonitrile,  
2-amino-4-(2-furyl)-6-(1-methyl-1H-pyrrol-2-yl)nicotinonitrile,  
2-amino-4-(2-chlorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-6-(2-furyl)-4-(4-phenoxyphenyl)nicotinonitrile,
- 20 2-amino-4-pyridin-3-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-6-[[2-(4-chlorophenyl)-2-oxoethyl]thio]-4-(2-furyl)pyridine-3,5-  
dicarbonitrile,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,
- 25 2-amino-6-(3-chlorophenyl)-4-(1H-imidazol-4-yl)nicotinonitrile,  
4-(6-amino-5-cyano-4-phenylpyridin-2-yl)-N-(tert-  
butyl)benzenesulfonamide,  
2-amino-4-methoxynicotinonitrile,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]benzoic acid,
- 30 4,6-diamino-2-[(4-methoxyphenoxy)methyl]-2,3-dihydrofuro[2,3-b]pyridine-  
5-carbonitrile, 2-amino-4-(2-fluorophenyl)-6-(4-  
methoxyphenyl)nicotinonitrile,

4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]-*N*-(tert-butyl)benzenesulfonamide, (2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,  
3-pyridinecarbonitrile, 2-amino-4-methylm  
5 2-amino-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(3-hydroxyphenyl)nicotinonitrile,  
4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzamide,  
2-amino-4-(2-furyl)-7-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2-furyl)-6-(1H-indol-3-yl)nicotinonitrile,  
10 2-amino-4-pyridin-4-yl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(3-fluorophenyl)-6-(4-hydroxyphenyl)nicotinonitrile,  
2-amino-4-[2-(difluoromethoxy)phenyl]-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
15 2-amino-4-(2-furyl)-6-thien-3-ylnicotinonitrile,  
2-amino-4-(3-fluorophenyl)-6-(4-methoxyphenyl)nicotinonitrile,  
2-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]phenylboronic acid,  
2,4-diamino-6-propylpyridine-3,5-dicarbonitrile, and  
prodrugs, salts, tautomers, and combinations thereof.

20 9. The compound according to claim 1, wherein the aminocyanopyridine MK-2 inhibiting compound comprises at least one compound that is selected from the group consisting of:

2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
25 2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
2-amino-3-cyano-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-8-carboxylic  
30 acid,  
4-[2-amino-3-cyano-6-(2-furyl)pyridin-4-yl]-1H-pyrrole-2-carboxamide,  
2-amino-4-phenyl-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,

- 2-amino-6-(2-furyl)-4-(1-methyl-1H-imidazol-4-yl)nicotinonitrile,  
8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
2-amino-4-(2-furyl)-8-hydroxy-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(2,6-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
5 carbonitrile,  
2-amino-6-(4-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-6-(2-furyl)nicotinonitrile,  
2-amino-4-(2-fluorophenyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
10 4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]benzoic acid,  
2-amino-6-(2-furyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,  
2-amino-3-cyano-4-(4H-1,2,4-triazol-3-yl)-5,6-dihydrobenzo[h]quinoline-8-  
carboxylic acid,  
15 2-amino-6-(3-hydroxyphenyl)-4-(1H-imidazol-5-yl)nicotinonitrile,  
2-amino-6-(2-furyl)-4-(1H-imidazol-4-yl)nicotinonitrile,  
2-amino-4-(2,4-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile, 4,6-diamino-2-(trifluoromethyl)-2,3-dihydrofuro[2,3-b]pyridine-  
5-carbonitrile,  
20 2-amino-4-(2-furyl)-6,8-dihydro-5H-pyrrolo[3,4-h]quinoline-3-carbonitrile,  
4-[6-amino-5-cyano-4-(2-fluorophenyl)pyridin-2-yl]benzoic acid,  
2-amino-4-(2-furyl)-5,6-dihydro-1,8-phenanthroline-3-carbonitrile,  
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,  
2-amino-4-(1-methyl-1H-imidazol-4-yl)-6-phenylnicotinonitrile,  
25 2-amino-4-(2-furyl)-6-(1H-pyrazol-3-yl)nicotinonitrile,  
4-[6-amino-5-cyano-4-(1H-imidazol-5-yl)pyridin-2-yl]benzoic acid,  
2-amino-4-(3-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,  
2-amino-6-(3,4-dihydroxyphenyl)-4-(2-fluorophenyl)nicotinonitrile,  
30 *N*-{4-[6-amino-5-cyano-4-(2-furyl)pyridin-2-yl]phenyl}methanesulfonamide,  
2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrrolo[2,3-h]quinoline-3-carbonitrile,  
2-amino-4-(1H-imidazol-5-yl)-6-phenylnicotinonitrile,

2-amino-4-(2-furyl)-5,6-dihydrobenzo[h]quinoline-3-carbonitrile,  
2-amino-4-(1H-imidazol-5-yl)-6-(4-methoxyphenyl)nicotinonitrile, and  
prodrugs, salts, tautomers, and combinations thereof.

5           10.    The compound according to claim 1, wherein the  
aminocyanopyridine MK-2 inhibiting compound comprises at least one  
compound that is selected from the group consisting of:

2-amino-4-(2-fluorophenyl)-6,8-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,

10           2-amino-4-(2-furyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-carbonitrile,  
2-amino-4-(2,3-difluorophenyl)-6,7-dihydro-5H-pyrazolo[3,4-h]quinoline-3-  
carbonitrile,

8-amino-6-(2-furyl)-4,5-dihydro-1H-pyrazolo[4,3-h]quinoline-7-carbonitrile,  
and prodrugs, salts, tautomers, and combinations thereof.

15           11.    The compound according to claim 1, wherein the compound  
is capable of inhibiting the activity of mitogen activated protein kinase  
activated protein kinase-2.

12.    The compound according to claim 1, having an MK-2  
inhibition  $IC_{50}$  of below 200  $\mu$ M.

20           13.    The compound according to claim 1, having an MK-2  
inhibition  $IC_{50}$  of below 10  $\mu$ M.

14.    The compound according to claim 1, having a  $TNF\alpha$  release  
 $IC_{50}$  value of below 200  $\mu$ M in an *in vitro* cell assay.

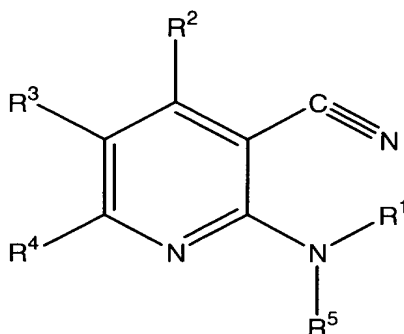
15.    The compound according to claim 1, having a  $TNF\alpha$  release  
 $IC_{50}$  values of below 5 $\mu$ M in an *in vitro* cell assay.

25           16.    The compound according to claim 1, wherein the  
aminocyanopyridine MK-2 inhibiting compound provides a degree of  
inhibition of  $TNF\alpha$  in a rat LPS assay of at least about 25%.

30           17.    The compound according to claim 1, wherein the  
aminocyanopyridine MK-2 inhibiting compound provides a degree of  
inhibition of  $TNF\alpha$  in a rat LPS assay of above 80%.



18. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an aminocyanopyridine compound, or a pharmaceutically acceptable salt or tautomer or isomer thereof, the compound having the structure:



5

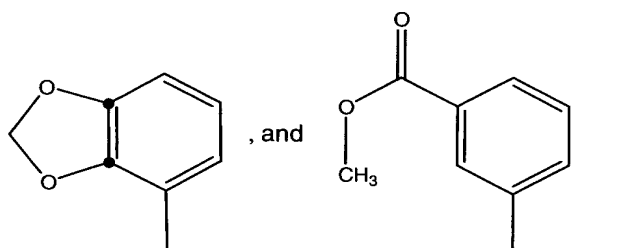
wherein:

R¹ is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylamino, C₁-C₄ alkyl, di-(C₁-C₄ alkyl)amino C₁-C₄ alkyl, C₁-C₄ alkyl-C₁-C₄ alkyl, hydroxy C₁-C₄ alkyl, and aryl C₁-C₄ alkylcarbonyl;

R² is selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, amino, amino C₁-C₄ alkyl, C₁-C₄ alkylamino, aryl, heteroaryl, heterocyclyl, carboxy, carboxy C₁-C₄ alkyl, C₁-C₄ alkoxy, hydroxy, hydroxy C₁-C₄ alkyl, hydroxy C₁-C₄ alkylamino, hydroxy C₁-C₄ alkoxy, C₁-C₄ alkoxy C₁-C₄ alkyl, C₁-C₄ alkoxy C₁-C₄ alkylamino, amino C₁-C₄ alkylamino, aryl C₁-C₄ alkyl, C₁-C₄ alkylamino C₁-C₄ alkyl, di C₁-C₄ alkylamino C₁-C₄ alkyl, C₁-C₄ alkyl C₁-C₄ alkyl, carboxy C₁-C₄ alkyl, aryl C₁-C₄ alkylcarbonyl, phthalamino C₁-C₄ alkyl, halo, carbamyl, C₁-C₄ alkylthio, C₁-C₄ alkoxyarylamino, C₁-C₁₀ mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from halogen, hydroxy, C₁-C₄ alkoxy, aryloxy, C₂-C₄ alkenyloxy, C₂-C₄ alkynyloxy, C₁-C₄ alkyl, carboxy, carbamyl, C₁-C₄ alkoxycarbonyl, C₁-C₄

alkoxycarbonyl C<sub>1</sub>-C<sub>4</sub> alkoxy, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub> alkylamino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy,

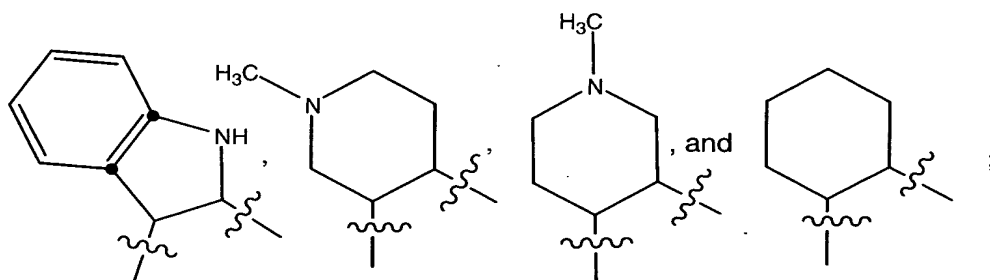
5



with the proviso that when R<sup>2</sup> is aryl, it is not substituted with nitro;

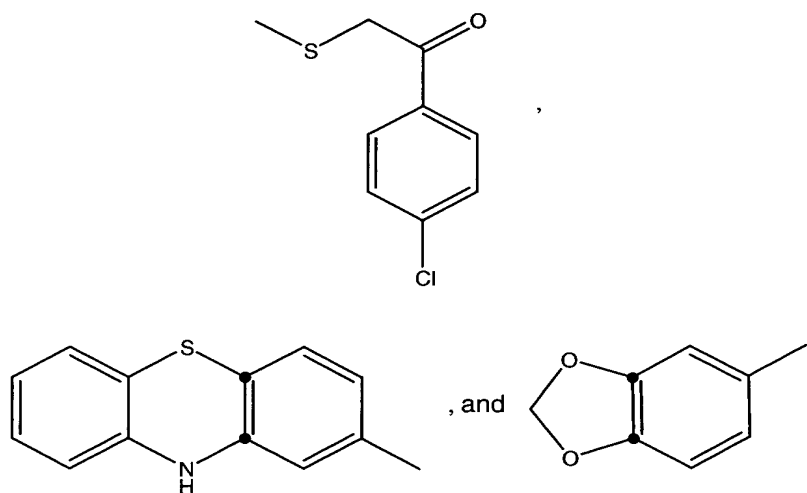
R<sup>3</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, cyano, amino C<sub>1</sub>-C<sub>4</sub> alkyl, amino, aryl, wherein the aryl group is optionally substituted with one or more group selected from halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, except that when R<sup>2</sup> is heteroaryl, R<sup>3</sup> is other than cyano, and

where the R<sup>2</sup> and R<sup>3</sup> groups are such that they optionally join to form a ring system selected from:

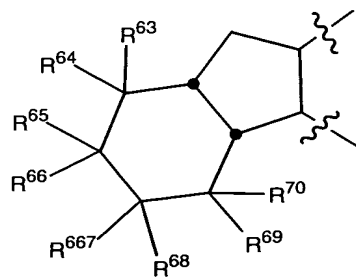
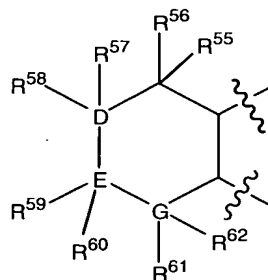
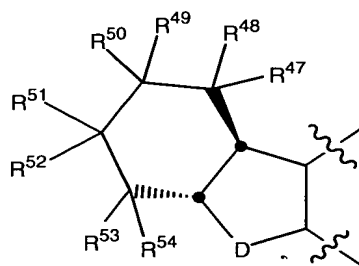
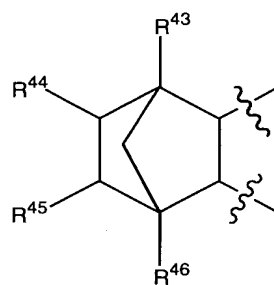
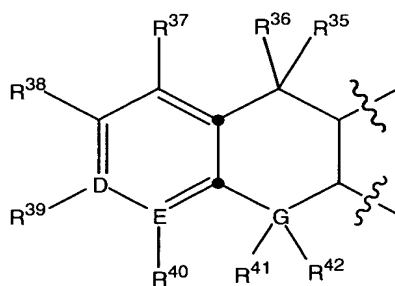
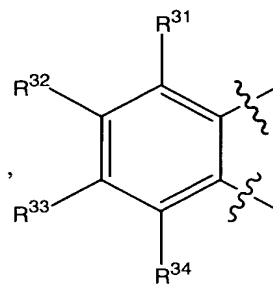
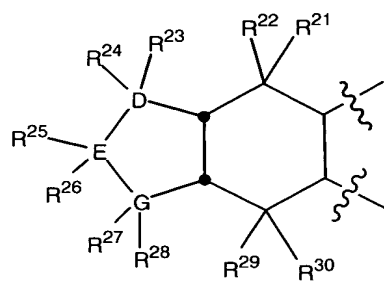
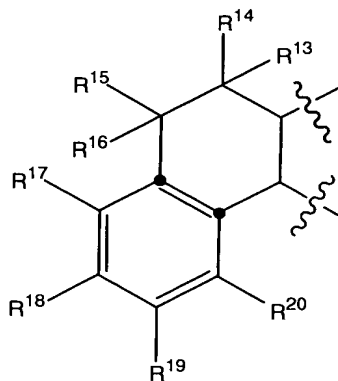
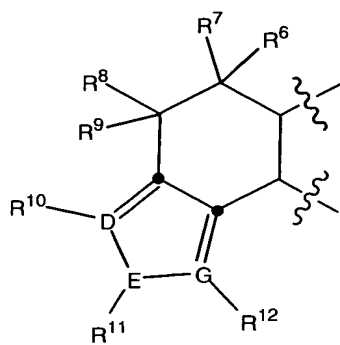


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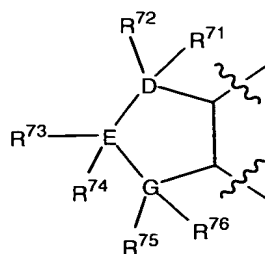
$R^4$  is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and heteroaryl groups optionally are substituted with one or more groups selected from halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, carboxy, carbamyl, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy



wherein the  $R^3$  and  $R^4$  groups are such that they optionally join to form a ring system selected from:



, and



;

D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

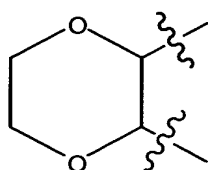
R<sup>5</sup> is selected from the group consisting of -H, and C<sub>1</sub>-C<sub>5</sub> alkyl, provided that at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> is other than hydrogen;

5 and

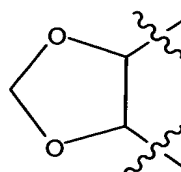
wherein the R<sup>1</sup> and R<sup>5</sup> groups optionally join to form a piperidyl ring or a oxaxinyl ring;

10 R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, R<sup>30</sup>, R<sup>31</sup>, R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup>, R<sup>36</sup>, R<sup>37</sup>, R<sup>38</sup>, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, R<sup>53</sup>, R<sup>54</sup>, R<sup>55</sup>, R<sup>56</sup>, R<sup>57</sup>, R<sup>58</sup>, R<sup>59</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup>, R<sup>63</sup>, R<sup>64</sup>, R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>70</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, and R<sup>76</sup> are each optionally present and are each independently selected from the group consisting of -H, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, amino, nitro, hydroxy, 15 C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkenoxy, oxo, carboxy, halo, halo C<sub>1</sub>-C<sub>4</sub> alkyl, dihalo C<sub>1</sub>-C<sub>4</sub> alkyl, trihalo C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, cyano C<sub>1</sub>-C<sub>4</sub> alkyl, dicyano C<sub>1</sub>-C<sub>4</sub> alkyl, halophenyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkoxy, - (CH<sub>2</sub>)-O-(C<sub>6</sub>H<sub>4</sub>)-O-(CH<sub>3</sub>), carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub> alkylamino, di C<sub>1</sub>-C<sub>4</sub> alkylamino, tri C<sub>1</sub>- 20 C<sub>4</sub> alkylamino, amino C<sub>1</sub>-C<sub>4</sub> alkoxy, diamino C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, di C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, cyano C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, -(CH<sub>2</sub>)-O-(CF<sub>2</sub>)-CHF<sub>2</sub>, tetra C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C<sub>1</sub>-C<sub>4</sub> alkoxy, pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, *N*-pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy, 25 carboxy C<sub>1</sub>-C<sub>4</sub> alkyl - ethyl ester, pyridyl C<sub>1</sub>-C<sub>4</sub> alkyl, pyridyl C<sub>1</sub>-C<sub>4</sub> alkoxy, - COO-CH<sub>2</sub>-CH<sub>3</sub>, with the proviso that when E is -N-, R<sup>38</sup> is not cyano, and that when G is -N-, R<sup>36</sup> is -H; and

wherein R<sup>38</sup> and R<sup>39</sup> are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when  $R^1$ ,  $R^3$  and  $R^5$  are hydrogen:

$R^2$  is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl, (NZ<sub>1</sub>Z<sub>2</sub>)alkyl, or -R<sub>A</sub>R<sub>B</sub>;

where Z<sub>1</sub> and Z<sub>2</sub> are each independently selected from the group consisting of hydrogen, alkoxy carbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxy carbonyl, and formyl;

R<sup>A</sup> is selected from the group consisting of aryl and arylalkyl;

R<sup>B</sup> is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

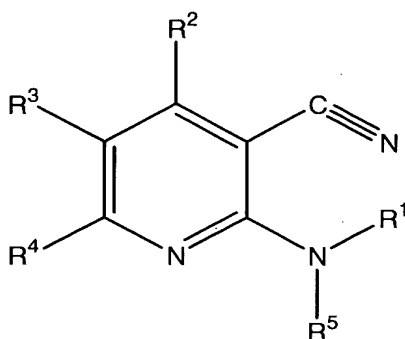
R<sup>4</sup> is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R<sub>C</sub>R<sub>D</sub>R<sub>E</sub>;

where R<sub>C</sub> is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R<sub>D</sub> is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl; and

R<sub>E</sub> is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.

19. A kit for the purpose of treating a TNF $\alpha$  mediated disease or disorder, the kit comprising a dosage form comprising at least one aminocyanopyridine compound, or a pharmaceutically acceptable salt thereof, the compound having the structure:

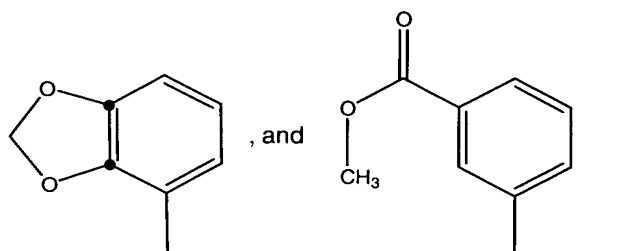


wherein:

R<sup>1</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, aryl C<sub>1</sub>-C<sub>4</sub> alkyl, amino, amino  
5 C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylamino, C<sub>1</sub>-C<sub>4</sub> alkyl, di-(C<sub>1</sub>-C<sub>4</sub> alkyl)amino C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkyl-C<sub>1</sub>-C<sub>4</sub> alkyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkyl, and aryl C<sub>1</sub>-C<sub>4</sub> alkylcarbonyl;

R<sup>2</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, amino, amino C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkylamino, aryl,  
10 heteroaryl, heterocyclyl, carboxy, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, hydroxy, hydroxy C<sub>1</sub>-C<sub>4</sub> alkyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkylamino, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkylamino, amino C<sub>1</sub>-C<sub>4</sub> alkylamino, aryl C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkyl, di C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkyl C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, aryl  
15 C<sub>1</sub>-C<sub>4</sub> alkylcarbonyl, phthalamino C<sub>1</sub>-C<sub>4</sub> alkyl, halo, carbamyl, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkoxyaryl amino, C<sub>1</sub>-C<sub>10</sub> mono- and bicyclic cycloalkyl, wherein aryl, heteroaryl, heterocyclyl, mono- and bicyclic cycloalkyl are optionally substituted with one or more of the groups selected from  
20 halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, aryloxy, C<sub>2</sub>-C<sub>4</sub> alkenyloxy, C<sub>2</sub>-C<sub>4</sub> alkynyloxy, C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy, carbamyl, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>4</sub> alkoxy, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub> alkylamino, di-C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub>

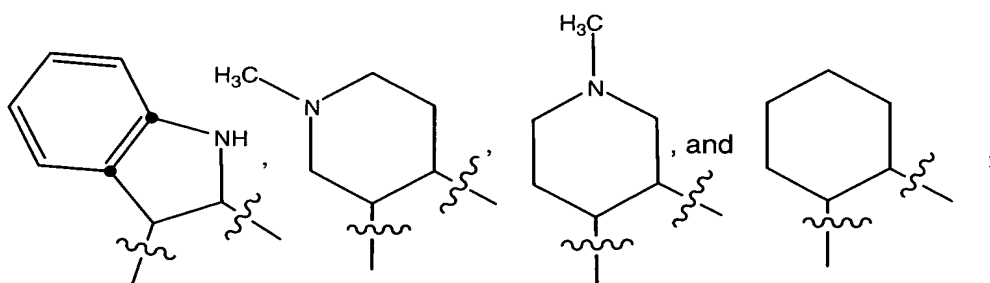
alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy,



5 with the proviso that when R<sup>2</sup> is aryl, it is not substituted with nitro;

R<sup>3</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, cyano, amino C<sub>1</sub>-C<sub>4</sub> alkyl, amino, aryl, wherein the aryl group is optionally substituted with one or more group selected from halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di- C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, except that when R<sup>2</sup> is heteroaryl, R<sup>3</sup> is other than cyano, and

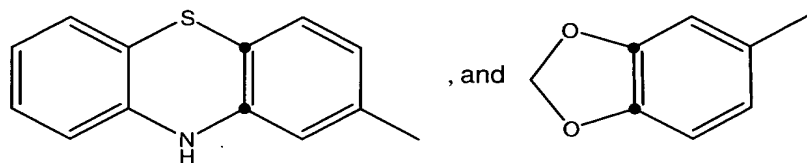
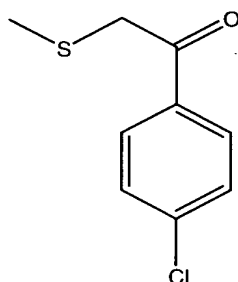
15 where the R<sup>2</sup> and R<sup>3</sup> groups are such that they optionally join to form a ring system selected from:



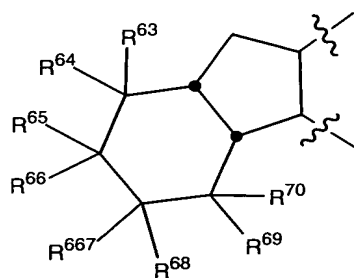
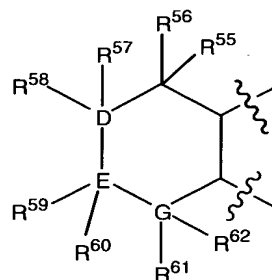
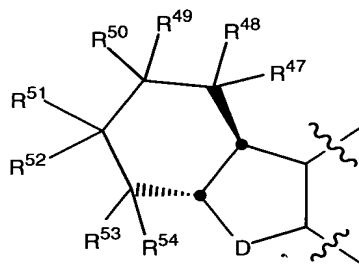
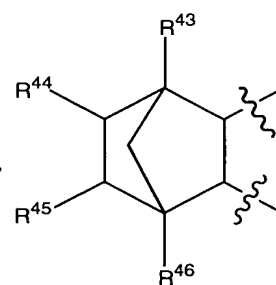
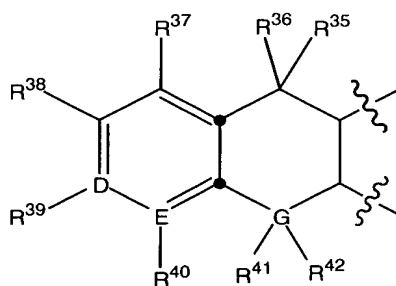
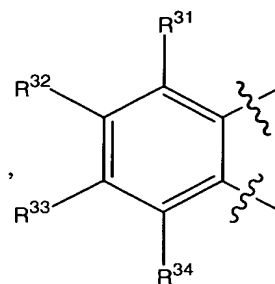
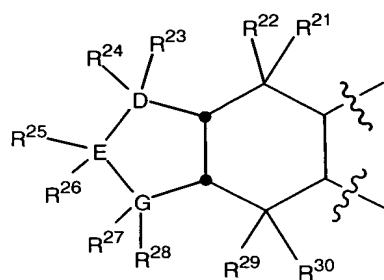
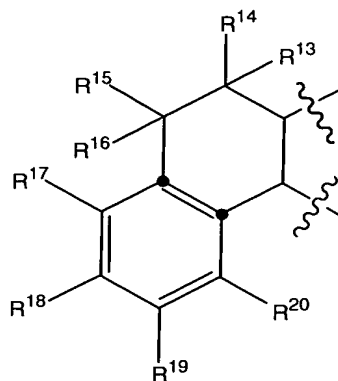
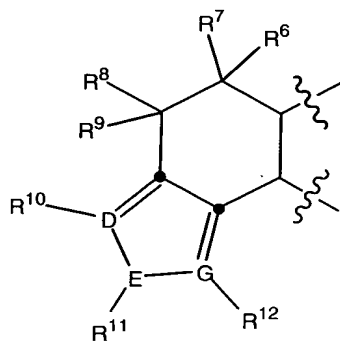
20 R<sup>4</sup> is selected from the group consisting of -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, mercapto, *N*-imidazolylphenyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, aminofluorobenzhydryl, aryl and heteroaryl, wherein the aryl and



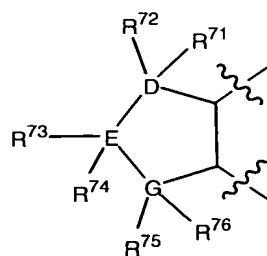
heteroaryl groups optionally can be substituted with one or more groups selected from halogen, hydroxy, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, carboxy, carbamyl, C<sub>1</sub>-C<sub>4</sub> alkoxycarbonyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkyl, carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, amino, di- C<sub>1</sub>-C<sub>4</sub> alkylamino, *N*-C<sub>1</sub>-C<sub>4</sub> alkyl-*N*-cyano C<sub>1</sub>-C<sub>4</sub> alkylamino, nitro, C<sub>1</sub>-C<sub>4</sub> alkylcarbonylamino, cyano, halo C<sub>1</sub>-C<sub>4</sub> alkyl, di-halo C<sub>1</sub>-C<sub>4</sub> alkyl, tri-halo C<sub>1</sub>-C<sub>4</sub> alkyl, halo C<sub>1</sub>-C<sub>4</sub> alkoxy, di-halo C<sub>1</sub>-C<sub>4</sub> alkoxy, tri-halo C<sub>1</sub>-C<sub>4</sub> alkoxy



wherein the R<sup>3</sup> and R<sup>4</sup> groups are such that they can join to form a ring system selected from:



, and



;

D, E and G are each independently selected from carbon, oxygen, sulfur, and nitrogen;

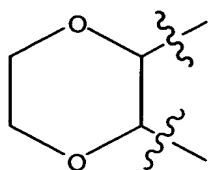
R<sup>5</sup> is selected from the group consisting of -H, and C<sub>1</sub>-C<sub>5</sub> alkyl, provided that at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> is other than hydrogen;

5 and

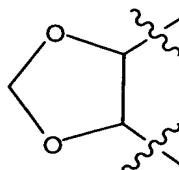
wherein the R<sup>1</sup> and R<sup>5</sup> groups optionally join to form a piperidyl ring or a oxaxinyl ring;

10 R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, R<sup>30</sup>, R<sup>31</sup>, R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup>, R<sup>36</sup>, R<sup>37</sup>, R<sup>38</sup>, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, R<sup>53</sup>, R<sup>54</sup>, R<sup>55</sup>, R<sup>56</sup>, R<sup>57</sup>, R<sup>58</sup>, R<sup>59</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup>, R<sup>63</sup>, R<sup>64</sup>, R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>70</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, and R<sup>76</sup> are each optionally present and are each independently selected from the group consisting of -H, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>1</sub>-C<sub>4</sub> isoalkyl, amino, nitro, hydroxy, 15 C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkenoxy, oxo, carboxy, halo, halo C<sub>1</sub>-C<sub>4</sub> alkyl, dihalo C<sub>1</sub>-C<sub>4</sub> alkyl, trihalo C<sub>1</sub>-C<sub>4</sub> alkyl, cyano, cyano C<sub>1</sub>-C<sub>4</sub> alkyl, dicyano C<sub>1</sub>-C<sub>4</sub> alkyl, halophenyl, hydroxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkoxy, - (CH<sub>2</sub>)-O-(C<sub>6</sub>H<sub>4</sub>)-O-(CH<sub>3</sub>), carboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkoxyamino, C<sub>1</sub>-C<sub>4</sub> alkylamino, di C<sub>1</sub>-C<sub>4</sub> alkylamino, tri C<sub>1</sub>- 20 C<sub>4</sub> alkylamino, amino C<sub>1</sub>-C<sub>4</sub> alkoxy, diamino C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, di C<sub>1</sub>-C<sub>4</sub> alkylamino C<sub>1</sub>-C<sub>4</sub> alkoxy, cyano C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, -(CH<sub>2</sub>)-O-(CF<sub>2</sub>)-CHF<sub>2</sub>, tetra C<sub>1</sub>-C<sub>4</sub> alkoxy C<sub>1</sub>-C<sub>4</sub> alkyl, phenyl, benzyl, benzoyl, aryl, *N*-morpholinyl, morpholinyl C<sub>1</sub>-C<sub>4</sub> alkoxy, pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, *N*-pyrrolidyl C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkylcarboxy, 25 carboxy C<sub>1</sub>-C<sub>4</sub> alkyl - ethyl ester, pyridyl C<sub>1</sub>-C<sub>4</sub> alkyl, pyridyl C<sub>1</sub>-C<sub>4</sub> alkoxy, - COO-CH<sub>2</sub>-CH<sub>3</sub>, with the proviso that when E is -N-, R<sup>38</sup> is other than cyano, and that when G is -N-, R<sup>36</sup> is -H; and

wherein R<sup>38</sup> and R<sup>39</sup> are such that they optionally join to form a ring system of the type selected from:



, and



;

with the proviso that when  $R^1$ ,  $R^3$  and  $R^5$  are hydrogen:

$R^2$  is other than alkenyl, alkyl, alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heterocyclealkylcarbonyl, (NZ<sub>1</sub>Z<sub>2</sub>)alkyl, or -R<sub>A</sub>R<sub>B</sub>;

where Z<sub>1</sub> and Z<sub>2</sub> are each independently selected from the group consisting of hydrogen, alkoxy carbonyl, alkyl, alkylcarbonyl, benzyl, benzyloxy carbonyl, and formyl;

R<sup>A</sup> is selected from the group consisting of aryl and arylalkyl;

R<sup>B</sup> is selected from the group consisting of aryl, arylalkoxy, arylalkyl, aryloxy, heterocycle, and heterocyclealkyl; and

R<sup>4</sup> is other than alkenyl, alkoxyalkynyl, alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocycle, heterocyclealkyl, or -R<sub>C</sub>R<sub>D</sub>R<sub>E</sub>;

where R<sub>C</sub> is selected from the group consisting of aryl, arylalkyl, heterocycle and heterocyclealkyl;

R<sub>D</sub> is selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl; and

R<sub>E</sub> is absent or selected from the group consisting of aryl, arylalkoxy, arylalkoxyimino, arylalkyl, aryloxy, heterocycle, heterocyclealkoxy, heterocyclealkyl, heterocyclecarbonyl, heterocycleimino, heterocycleoxy, heterocycleoxyalkyl, heterocycleoxyimino, heterocycleoxyiminoalkyl, and heterocyclesulfonyl.